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TOWN OF CARLISLE

**OFFICE OF
Zoning Board of Appeals**

**66 Westford Street
Carlisle, MA 01741
978-369-5326**

Minutes: Board of Appeals, January 29, 2007

The meeting was called to order at 7:36 p.m. in the Town Hall, 66 Westford Street. Board Members Cindy Nock (Chair), Steve Kirk (Clerk), Associate Members: Ed Rolfe, Steve Hinton, Town Counsels Dan Hill and Art Kreiger, board secretary Julie Levey, Peer Review Consultants Gerry Preble and Dave LaPointe from Beals & Thomas, the applicant, and interested parties were present. Ed Rolfe sits as a full member for this 40B Coventry Woods application.

Nock opened the continued hearing for **Case 0513, the application of Coventry Woods, MCO & Associates, Inc.** request for a Comprehensive Permit under Massachusetts General Laws Chapter 40B for the construction of a fifty-six unit, age restricted (55+) condominium development to be located off Concord Street.

Nock shared the evening's agenda with the attendees. Attorney Kreiger explained that the Board of Appeals alone decides the 40B hearing and that information provided to the board by town boards and the public are taken into account by the board to help them make an informed decision. Kreiger further explained that legal counsel's role is to advise the board on legal issues and criteria so that the decision reached by the board is legally defensible and less challengeable.

Exhibits were entered into the record:

146	Letter dated 1/16/2007	Horsley Witten Group – Coventry Woods Septic/Water Issues
147	Letter dated 1/22/07	Sullivan & Worcester Letter
148	Letter dated 1/23/07	Brueing and Kummer Letter
148	Letter dated 1/23/07	Planning Board – Review of Conditions
149	Letter dated 1/25/07	Board of Selectmen – Coventry Woods Recommendations
150	Letter dated 1/25/07	Louis Levine – Applicant attorney – Requesting closure of hearing
151	Memo dated 1/26/07	Board of Health – Condition Review & Recommendations
152	Letter dated 1/26/07	Beals & Thomas – Evaluation of Landscape and Irrigation Design
153	Letter dated 1/28/07	The Parkers – Abutter input to Coventry Woods
154	Email dated 1/11/07	Alex Parker – Water and Septic Issues
155	Document dated 1/17/2006	Submitted by Steve Hinton – Guidance Document for Water Management Act Permitting Policy
156	Email dated 1/17/07	Heidi Harring – Water Supply for Coventry Woods
157	Map rec'd 1/21/07	Submitted by Steve Hinton – map of stressed basins
158	Letter dated 1/22/07	April Stone and Michael Epstein
159	Map dated 12/11/06	Landscape Sketches – Kim Ahern Landscape Architects
160	Draft Decision	Dan Hill Version 1/18/07
161	Draft Decision	Redlined markup Planning Board

162	Draft Decision	Redlined markup Michael Epstein
163	Draft Decision	Redlined markup – Atty. Ed. Wall
164		Septic Design and Landscaping
165	Email dated 1/10/07	Dan Hill to Applicant re: Peer Review Fees
166	Letter dated 1/29/07	Edward Wall Atty. for L. Salemy, response to Levine

Nock addressed the Peer Review escrow account's insufficient funds. Applicant Mark O'Hagan said that he would not provide additional fees to the fund and that he had provided \$35-40K already and would like to finalize the process. He feels that Beals & Thomas has reviewed all that is necessary and that no new information is being addressed. Nock clarified that the bills are for work already discussed and conducted in October – December. Attorney Hill cited the Rules & Regulations that require replenishment of the account once it drops below a certain point. Hill said the board could waive strict compliance with the requirement for this meeting and move forward, impose a condition on the comprehensive permit to require payment or continue the hearing until the applicant replenished the fund.

Attorney for the applicant, Lou Levine, said that if the board closed the hearing tonight the applicant would pay the fees; however, if the board did not close the hearing, the applicant would not provide any additional funds.

Rolfe felt that there were still substantive issues that required additional data such as Septic C and well water. Hinton felt the applicant needed to provide more engineering work. Nock reported that \$7,000 was currently invoiced and outstanding.

Rolfe moved to waive strict compliance to town regulation requiring escrow account replenishment and amended the motion to further define the waiver for the purposes of the January 29, 2007, meeting only. Hinton seconded the motion. The board voted unanimously to waive the requirement for the purposes of the evening's hearing.

Levine objected to Counsel's leading the discussion on Waste Water Management. Kreiger clarified that the board is not looking to counsel for explanation and that the board is reading the information provided by the town boards.

Hill reported that the Board of Health had provided recommendations in their January 26 memo. Martha Bedrosian, Chair of the Board of Health, explained that the Board of Health is concerned with Septic System C and its impact beyond the development's property line. The Board of Health requests mounding analysis of Septic C pre-permit to determine that the total fecal coli form and virus transport at the property line be limited to "0" colonies and "0" units, respectively, to insure the quality of the drinking water supply. The Board of Health strongly recommends that a hydrogeological study be conducted pre-permit to determine the feasibility of the development

O'Hagan said that he is required to obtain a Title V permit from the Board of Health and that he will do that once he obtains the Comprehensive Permit. O'Hagan noted that the development is 150% in compliance with local bylaws and the septic systems are Title V compliant. O'Hagan noted the designing engineers are well-known and well-respected in town.

In response to Hinton, Hill said DEP did advise that a mounding analysis would be required at the time the developer submits its plans to the Board of Health under Title 5.

Preble said that DEP required pressure dosing and mounding analysis and that if the Board of Health required other tests they could be determined during the application process. Preble stated that due to the BOH Supplementary Regulations which acknowledge local conditions and concern for virus transport, the groundwater modeling and transport analysis may be considered by the BOH during the review of the Application. Bedrosian explained that the Board of Health is concerned with the lateral movement of materials, that the system may not be constructible, and that water impact must be determined pre-permit due to the size of Septic System C. In response to Nock, Hill said that hydrogeological transport study/testing is not in the Board of Health regulations. However, the hydrogeological study could be requested under Title V regulations. Kreiger further clarified that it was not a standard requirement and that the Board of Health must justify the request. Further, Kreiger continued, the applicant could challenge the BOH and the testing may not ever take place. Nock noted that the Planning Board, Board of Selectmen and abutters also requested Septic C testing pre-permit.

David Freedman, Chair Planning Board, reiterated that the Board of Health feels that the septic system can not be built and that a definitive plan has not been submitted. Freedman cited the Mass Housing letter directing the board to consider concerns regarding septic system and water supply. Freedman said that BOH made their concerns clear about the size of the mound for Septic C and that it may extend into the neighbors yard which would affect site control.

Abutter Mike Epstein referred to engineer Horsley Witten Group letters regarding analysis conducted on the Septic System C. Analysis indicates flow from the septic system will go directly to Epstein's water well and may flow towards abutter Kummer/Brueing's well. Epstein noted that Scott Horsley is a known, respected engineer. Recommendations from Horsley include having the Board of Appeals request a groundwater flow analysis to determine direction and content (such as nitrogen and virus levels) and to conduct a groundwater mounding analysis on Septic C to determine the feasibility of the septic system; both tests are recommended to be done prior to issuance of the Comprehensive Permit.

Board of Selectman John Williams referred to Mass Housing letter dated June 10, 2005 which states that water issues need to be addressed during the public hearing. Williams reiterated that the Planning Board and Board of Health have concerns that the Septic System as designed can not be built.

Attorney Ed Wall representing abutter Louis Salemy felt strongly that the burden of proof lay on the applicant to prove that the septic system could be built as designed. Wall stated that it was necessary to protect the health and safety of the community.

Preble noted that the septic system plans have not been submitted yet and without the plans it was not possible to judge whether the proposed conceptual system would meet Title 5. Preble explained that the mounding analysis and supporting field tests takes about 45 days and results in a computer model of the system which determines its feasibility. Preble also said that because the design plans had not been submitted it was important for the applicant's engineer to conduct the analysis/test as these would ultimately be needed when designing the septic system. Preble also felt that the fully designed septic system would be required to be approved by the Board of Health.

In response to Hill, Preble estimated the field testing component would cost about \$10,000 and would take about 3 weeks to a month. In response to Nock, Preble said this analysis could be used by the Board of Health in their review.

Bedrosian noted that some testing had been conducted on site but that many of the test wells had not been made deep enough. Bedrosian also felt that Title V was the minimum standard allowed and was not satisfactory for Carlisle. Bedrosian is concerned that the development may have a negative impact on abutters and future residents of the development. Bedrosian urged the Board of Appeals to act on the Board of Health's recommendations for the protection of Carlisle citizens.

O'Hagan said preliminary septic system calculations have been done, and once the final number of units is determined, the system will be fully designed and designed to obtain approval by the Board of Health. O'Hagan felt the Board of Health could not determine that the septic system was unconstructible as they did not have the system plans.

Hinton felt there was no confusion regarding the number of units and that if three professional engineers had concerns about constructability, then there must be some basis for their concerns. Hinton also felt that a fully defined project was necessary prior to the Board's rendering a decision. Hinton referred to the Mass Housing letter and reiterated that they had requested particular attention be paid to water and septic issues. Rolfe and Kirk agreed.

Hinton moved that the Board of Appeals require the applicant to conduct ground water mounding analysis on Septic System "C" in accordance with Title V standards and provide a solute transport model proving that nitrogen levels will meet drinking water standards at the property line and that total fecal coli form and virus transport at the property line be limited to "0" colonies and "0" units respectively. Analysis will be reviewed by Beals and Thomas and funds will be provided by the applicant for this review.

In response to Bedrosian, Kreiger said it was not appropriate to stop one hearing process to require the applicant to begin the Board of Health Title V review.

In response to Levine, Hinton said that this analysis would be required either by the Board of Health or the Board of Appeals. Levine felt the Board of Health could disagree with the analysis. Levine noted that Planning Board, Board of Health and Board of Selectmen meetings had taken place concerning Coventry Woods and that the applicant had not been invited. Bedrosian clarified that there had not been a hearing on Coventry Woods and that all were welcome to attend.

Kreiger recommended the Board of Appeals keep their function distinct from the Board of Health's and that the Board of Appeals should have their Peer Review Consultant review the analysis.

Rolfe seconded the motion. The Board voted unanimously (4-0) to require the applicant to conduct groundwater mounding analysis prior to the close of the hearing.

The Board moved onto the discussion of well testing. Nock noted that the Board of Selectmen had not requested well testing be conducted pre-permit. Bedrosian said that the Board of Health was concerned with hydraulic connectivity among the five wells and asked that the testing be conducted pre-permit. A letter has been drafted to the DEP with recommendations for the 48 hour well test to be conducted pre-permit in August and to clarify Zone I adequacy.

In response to Kirk, Bedrosian explained that DEP had recommended pump testing and had specified abutter well monitoring. In response to Bedrosian, O'Hagan said he had agreed to pump testing of abutter wells beyond what had been requested by the DEP. Bedrosian explained that the connectivity

testing would look where the five wells were drawing water from to determine if there is a connection between the wells and to determine if there would be any impact to the abutters' wells. Preble said that the 145 foot radius required for each well is a geometric exercise and the wells just fit into the allowable area. The concern is to determine whether the 5 wells are acting as one as this would increase the required well-head protection radius and thereby force the project's layout and arrangement to change

Preble said that the project is contingent upon the developer having an adequate water supply and whether the testing is done pre or post permit issuance, it would still be required. Preble went on to say that if anything happens during the well testing that indicates the property won't have water, then the make-up and/or the project will change. Everything depends upon the wells being functional and where they are supposed to be.

In response to Nock, Bedrosian said if there are fewer wells, then the radius of each well would increase. The Board of Health was split on whether to require the testing pre or post permit, but noted that it would be prudent to know before hand whether there was sufficient water for project viability. In response to Nock, Kreiger said that any changes to the project would require the applicant to return to the Board of Appeals.

Freedman cited the November 21, 2005 Board of Appeal minutes where the Board of Health had recommended conflict well testing prior to issuance of the permit, a December 5, 2005 Board of Selectmen letter regarding water issues and that the Planning Board had taken a strong position requesting 48-hour pump and water connectivity testing pre-permit. Freedman reported that the Advisory Board, consisting of two Board of Health members, two Planning Board members and two Board of Selectmen members, concluded that the data be collected pre-permit. Freedman recommended that the septic testing be done now but that the water testing would not be meaningful until August.

Freedman noted that if testing concludes connectivity to the wells, the plan will need to be redone. The Advisory Board also requested that if the testing is done post-permit, the Board condition the decision not allowing the applicant to appeal the decision based on these issues. Kreiger advised that the 'no appeal clause' was not realistic and that the Board should make a decision without stipulation to the applicant.

Levine reviewed that 40B is an expedited process where it is not required to get every permit required prior to receiving the Comprehensive Permit. Levine noted that if the water tests fail and radius needs to be larger, the project could not go forward because it would go beyond the property line and any changes would require the applicant to return to the Board.

Kreiger agreed that if the project moves forward on inadequate data, the applicant has the risk and if it is determined that there is no water supply, the project will not be built. Kreiger felt that the septic modeling requiring a 25-30 day testing period and given the number of issues to be reviewed, would not cost the applicant time, however, requiring the applicant to wait until August to test the water while keeping the hearing open, would be a concern and most likely not supported by HAC.

O'Hagan explained that if any change were necessary to the plan, he would submit the change to the Board and if it were judged to be a substantial modification, a new hearing would be opened. Kreiger further clarified that a new hearing would include a fresh look at the conditions relating to that change.

Williams stressed that the Board of Selectmen encouraged the hearing to remain open until the Septic System C analysis was conducted. Williams felt that post permit water testing could be appealed and thus has higher risk. In response to Hinton, O'Hagan would make an appeal determination on the entire decision and would not unequivocally agree to not contest water-well testing. Williams asked that the Board request a letter from the applicant stating that he will not appeal the decision based on the water well testing.

Wall emphasized that the integrity of the water source is the issue and that the DEP letter of June 6 did not address the irrigation well.

Epstein referred to the November 21, 2005 Board of Appeal minutes where it was noted that the town requested pre-permit water testing be conducted. The town, without a public water supply, has concerns with water adequacy especially with the proposed density of the development. Epstein also noted that the applicant had been asked whether he would take on the economic responsibility for the water issues and the applicant said he would not. Referring to a December 12, 2005, letter from Ken Kimmel, Kimmel had cautioned that post permit conditions could be challenged and thrown out. Epstein felt that the water issue had been addressed early on in the hearing and the applicant had had ample opportunity to conduct testing.

O'Hagan said he had not conducted the testing in August 2005 because there was not an agreement in place on testing.

In response to Nock, Preble said connectivity testing and water testing both require the wells to be put in and agreed that August would be the time when there was maximum draw on to the water. Kreiger recommended not delaying the issuing of the permit until August as well as not requiring the applicant to agree to not appeal the condition. In response to Rolfe, O'Hagan said the water testing was required. Kreiger agreed that the water testing was required and that if the applicant objected the HAC would not overturn the water testing condition. Hill noted that DEP did not stipulate to when the water testing was to be conducted and if August testing were imposed, the applicant could appeal the timing.

The Board felt based on counsel recommendations that it was not prudent to keep the hearing open until August and that the water testing be required as a post permit condition.

Levine said the applicant did not want to be involved in an appeal with HAC. Levine said that if they did appeal the decision then all aspects of the decision would be looked into. Kreiger concurred that if the applicant or the abutters appeal the decision, the entire decision is appealed. Kreiger advised that the board should decide whether water tests be conducted pre or post permit and deal with the particulars of the condition at a later time.

The Board moved to not require pre-permit water testing. Kreiger noted that the board's intent was not to hold up the permit until August based on this issue. O'Hagan said he clearly understood the Board's intent.

Peer Review Consultant and Landscape Architect, David Lapointe presented the findings on the Irrigation and Landscape plan. Lapointe said the applicant had made an effort to reduce the irrigation water demand by incorporating low impact development techniques to some degree. Lapointe said the amount of irrigation could be reduced further by preserving existing vegetation, reducing the lawn area, using shrubs and grass species that are less water dependent, and using more native materials. Lapointe

suggested that because the development would be completed in phases, the total amount of water needed at any given time for irrigation could be provided by a water truck. He also felt that increasing the number of cisterns and capturing more roof run-off would reduce the demand on the water supply. Lapointe suggested utilizing a drip irrigation system which works at a 90% efficiency level. The current one mentioned in the plan work at 80% efficiency.

Lapointe also noted that although a common assumption is 1 inch of water per week for lawn growth, he also felt that grass being a natural vegetation often managed to survive without being watered. Overall, Lapointe felt that by using some supplemental water to establish the new plantings and utilizing quality soil, cisterns, and roof runoff, an irrigation well was not a necessity for the development.

Preble noted that water trucks have been used for highway and golf course watering. Rolfe requested an opinion from Beals and Thomas on the January 26 Board of Health letter that requested limits on the amount of water to be pumped from the irrigation well. Preble felt that 10,000 gallons would be adequate but felt that an irrigation well may not be needed if some of the recommendations were implemented. Hill reiterated that Beals and Thomas felt that no irrigation (0 gallons per day) would be workable. O'Hagan felt that LID measures had been incorporated and that they would work further to address the concern and asked the Board to be reasonable and fair with its determination.

Abutter Joan Parker suggested reducing lawn size and using xeriscaping. She also clarified that other residents of Carlisle may use irrigation systems but none had irrigation wells to her knowledge.

Freedman suggested the Board of Health review the Beals and Thomas memo and respond to it. Hinton asked for time to review the report. The Board said they would review the input, evaluate it and make a determination at the next meeting.

Hill strongly advised the Board to request a pro forma review. He felt that it was critical for the board to understand the economic impact of the conditions especially with the applicant threatening to take action with the Housing Appeals Committee.

Levine submitted a letter stating that the applicant considered the hearing closed as of today and would not longer participate (Exhibit #167). Levine felt that the Board would continue the hearing into August. He said that although he did not want to go to HAC, he felt the hearing should be dealt with efficiently and closed.

Kreiger stated that there was nothing suggested in the hearing that would keep it open into August and in fact just the opposite was the case. Levine agreed that the Board had not indicated that it would still be ongoing into August but felt with the request of the pro forma the hearing would be extended into the summer. In response to Kreiger, Levine said he would have submitted the letter even if the Pro Forma had not been requested.

Kreiger advised that the applicant does not have the power to close a hearing.

Levine informed the hearing that the letter contained language recommended by the HAC when the applicant felt the hearing had taken long enough.

Rolfe moved to request the applicant to submit a revised pro forma on the proposed draft conditions.

Levine argued that they did not have the conditions to base the pro forma on.

In response to Kirk, Hill explained that the applicant would provide estimates of the cost of conditions contained in the January 18, 2007 draft decision, to determine what may be uneconomic and would provide costs for what the Board is considering.

Hinton seconded the motion and the Board voted unanimously (4-0) to require an updated Pro Forma review.

The Board scheduled the next meeting for Monday, February 5, 2007.

It was decided that the Scenic Road Bylaw would be continued until the next meeting.

Rolfe motioned to require the applicant to replenish the escrow account to the \$20,000 level by February 5, 2007. Hinton seconded. The Board voted unanimously (4-0) to approve the motion.

Freedman said that the scenic road hearing required a set time and requested that the tree warden be present. Freedman noted that a number of the trees were not marked. The Scenic Road hearing was scheduled for 7:30 p.m. on February 5, 2007. Rolfe requested that all trees be marked prior to the hearing.

Kirk noted that the Board wanted to adequately address the issues and to continue to work through the process.

The hearing was continued until February 5, 2007.

The meeting was adjourned at 11:42 p.m.

Respectfully submitted

Julie Connor Levey